

1100 Series

Diesel Engine - Industrial Open Power Unit

1104C-44T

74.5 kW/100 bhp

The new 1100 Series family of IOPU engines boasts unsurpassed productivity levels.

By combining the market leading 1100 Series engine with a matched cooling and air filtration pocket, Perkins is confident that our engines will meet increasing customer demands. The new 1100 Series range provides customers with a compact and self-contained engine package, that optimises performance and maximises value.

Perkins has transformed the threat of new emission laws into the opportunity to develop an engine with improved performance and reliability. Not only does the 1104 comply to USA EPA Tier 2 and EU Stage 2 off-highway emissions legislation, it also exceeds customer expectations on performance. Perkins has consequently created a unique, customer inspired engine family which is undoubtedly a benchmark within the diesel engine market.

Class Leading Performance

The 1104C-44T boasts an even higher torque capacity than its successful predecessor. An impressive low speed torque of over 400 Nm is available to deliver improved machine response.

Cleaner and Quieter

Extensive combustion research has resulted in an engine which operates with smoke levels barely visible to the naked eye. Perkins innovative Eco-filtration system provides high quality construction with a re-usable canister, a disposable inner element and a simpler service process. Developments in numerous individual components such as a new cylinder block design and alterations to the front end gear train have resulted in reduced noise levels throughout the engine's complete operating range. An improvement of up to 3dBA in bare engine noise over its predecessor.

Quality by Design

Improvements to all aspects of engine production: from concept through to manufacturing, has resulted in a higher level of engine performance, enhanced reliability and greater durability. This combined with extensive investigation into manufacturing processes has simplified sub-assemblies and improved joint and sealing technology.

Ease of Installation

Design considerations to minimise installation issues provide easy and efficient engine replacement through the carryover of the existing envelope size and mounting points. The addition of a matched radiator to the IOPU engine package allows the engine to run at its optimum performance level.

Lower Operating Costs

Service intervals have doubled and are now set at 500 hours as standard. This confidence in engine reliability has also enabled the warranty period to be extended to 2 years with 3 years on majors. Customers will also benefit from increased fuel economy which has improved by as much as 6% over its predecessor.

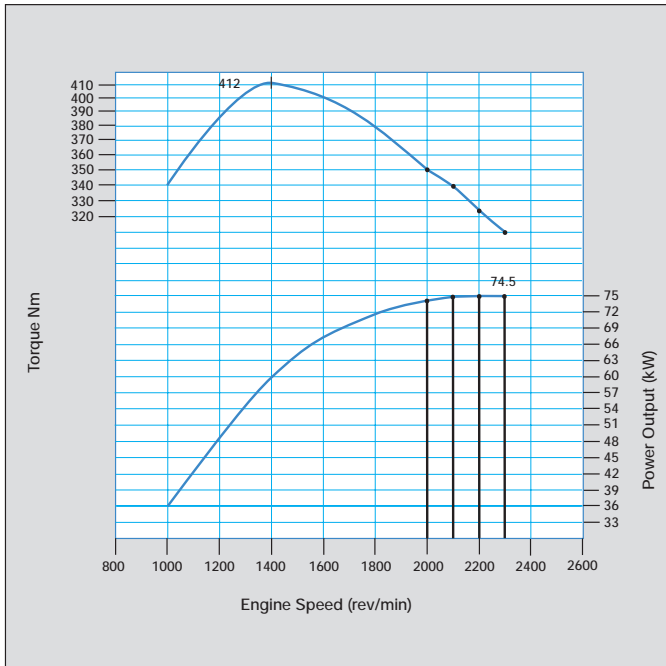
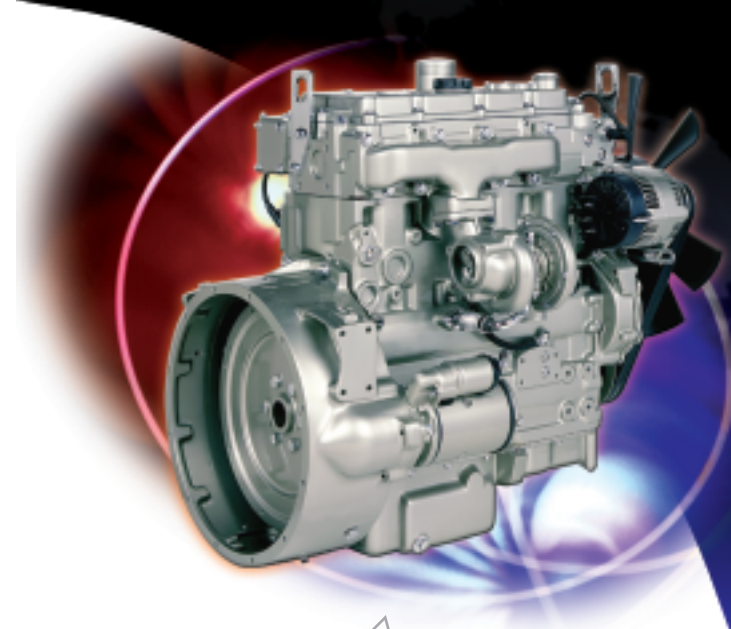
Product Support

Total worldwide service continues to be provided through a network of 4000 distributors and dealers. This is enhanced by the introduction of TIPSS (The Integrated Parts and Service System) which represents a step change in diesel engine support. TIPSS enables customers to specify and order parts electronically, as well as service electronic or mechanical engines with the aid of on-line guides and service tools.

Engine performance	Net intermittent	Engine speed	Net continuous	Engine speed
Max power kW	74.5	2400	67	2400
Max power bhp	100	2400	90	2400
Max torque Nm	412	1400	371	1400
Max torque lbf ft	304	1400	274	1400

Power for a run-in engine after 60 hours
Rating standard ISO/TR 14396

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Lower speed ratings may not be read from this curve. For other ratings consult Perkins Engines Company

Option Groups

In order to meet the varying demands of our individual customers, Perkins provide a wide selection of optional items. These enable companies to produce a customised end product, precisely matched to their needs.

General Data

Bore and stroke	105 mm x 127 mm
Number of cylinders	4 In-line
Cubic capacity	4.41 litres (269 cu.in)
Cycle	4 stroke
Aspiration	Turbocharged
Combustion system	Direct injection
Compression ratio	18.25:1
Engine rotation	Anticlockwise viewed on flywheel
Governing	All speed mechanical
Cooling system	Pressurised coolant
Length	1270 mm
Width	633 mm
Height	962 mm
Dry weight	TBA kg

Engine Specification

Cast iron engine block
Flywheel housing SAE3
Flywheel
Ecoplus fuel filter
Spin-on oil filter
Glow plug starting aid
12 or 24 volt alternator
12 or 24 volt starter motor
LHS PTOs - 142 Nm
Puller or pusher fans
Radiator
Lub oil sump steel, flat-bottomed with dipstick on lhs
Balancer or non-balancer
Integral Inlet manifold
Gear driven coolant pump
Oil filler - middle of top cover



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All information in this document is substantially correct at the time of printing but may be altered subsequently by the Company

